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THIS IS UNEVALUATED INFORMATION

1. "Limestone, which is needed by the iron and steel industry as a flux, is found in large quantity in Czechoslovakia. However, it is not in the immediate neighbourhood of all the important iron and steel plants.

"The iron and steel works in Bohemia are very well supplied by limestone from the big Silurian basin which extends from Shumava to a northeasterly direction beyond Prague, and has a length of about 180 km and a width of 45 km.

2. "The limestone quarries of the iron works in Kladno and in Kraluv Dvur are of the greatest importance to the undertaking, as the ore from this Silurian basin is rather siliceous and requires a considerable addition of lime in the blast furnaces. It is therefore a very happy chance that the limestone which the iron works quarries contain in the immediate neighbourhood of their ore-pits is of quite exceptional purity and hardness.

3. "This limestone retains its great hardness even after it has been calcined, which is a great advantage in the Thomas Process. The saturated limestone (with the content of 96 to 99% $CaCO_3$) occurs in the heart of the Silurian Basin between beds which are rich in silicates, whereas within the upper Silurian formation there is a deposit of bitter-spar 4 meters in thickness, which is quarried at Chuchle n/Vltava River.

"This bitter-spar contains 18 to 20% of MgO and 30 to 32% CaO. As opposed to the limestone it is almost entirely amorphous, can easily be sintered and serves for lining the basic convertors.

"The iron works in Kladno erected for the calcining of limestone in shaped furnaces, is heated by blast furnace gas.

"The Skoda works in Pilsen own the lime kilns in Zdice, situated in the middle of the Silurian basin.

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"But the neighbourhood of Ostrava is poor in limestone. Only the Vitkovice works possess occurrences of very pure limestone on the chalk formation in Sternberg, which is relatively near to the works. But the installation is not developed to supply more than that for its own works. Other quarries are relatively far away in Hranice or in Prostejov. In these quarries there is calcined a lime of a very good quality for the building industry, and they were not equipped for the supply of limestone and lime on a large scale for the metallurgical plants.

"That is the reason why the iron and steel works in Trinec built its own quarries and calcining plant in Varin near Zilina in Slovakia. The limestone from this quarry is not very pure and contains a relatively large amount of magnesium. This composition is good for the blast-furnaces, but not for open-hearth furnaces, and the quality of supplied lime depends on the care with which the limestone is sorted in the quarries.

"For the iron and steel works in Vitkovice and in Trinec there was planned a large increase of output. The same increase of output was also foreseen for the quarries.

6. "The steel plants in Ostrava usually use dolomite of a very good quality from Poland, but after the war the supply of this dolomite was interrupted and the steel plants began to use the poor magnesite from Slovakia. This poor magnesite (or the dolomite with greatest content of MgO), was not used before and remained in the quarries for magnesite. The use of this kind of dolomite, which later received the name "Basifrit" gave very good results for the bottom of open-hearth furnaces and the use of the dolomite from Polish provinces was stopped.

"For the bottom of electrical furnaces the Slovakian "Basifrit" did not give the same successful results and the use of dolomite for this purpose continued.

"In Slovakia there are very large occurrences of limestone. The future Slovakian iron and steel plant (in Kosice) and these plants which are actually worked in Podbrezova and Tisovec have enough limestone and lime.

7. "What is lacking in Czechoslovakia, is fluor spar. Usually Czechoslovakian iron and steel works receive fluor spar It is possible to make a stock of fluor spar for many years ahead and usually this happened. The steel plants in Trinec use bauxite instead of the fluor spar and according to my opinion the bauxite is more advantageous, because it does not deteriorate the bottom and refractory lining of the open-hearths. Bauxite is imported from Hungary or Rumania."

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